

Abstract

A processing system uses image processing technology to classify features in time series data. In atmospheric applications, the features can be used to detect outliers and/or failure modes in time series data from atmospheric measurement systems. The processing system is configured to: 1) process the time series data with a plurality of membership functions to generate a plurality of hypersurfaces, 2) process the hypersurfaces to generate a composite hypersurface, 3) process the composite hypersurface to identify clusters, and 4) process the clusters to classify the features.